

### REMARKS

Claims 9-19 are pending. Claim 9 has been amended. Claims 1-8 have been cancelled without prejudice or disclaimer as to Applicant's right to pursue the subject matter of these claims in a continuing application. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

It is respectfully requested that this Amendment be entered as it places the Application in condition for allowance or at least in better form for appeal.

### Claim Rejections Under 35 U.S.C. § 102

Claims 9, 11, 18, and 19 were rejected under 35 U.S.C. § 102(b) over Fang et al. (U.S. Patent No. 5,858,844. Applicant respectfully traverses this rejection.

Claim 9 recites, in part, a method of fabricating a semiconductor device, including forming a metal oxide layer with a substantially uniform thickness at an interface between the silicon oxide layer and the conductive layer. In contrast, Fang teaches a gate oxidation process, wherein an oxide layer 20 is formed around the gate conductive layer 10 and extends into the edges of the gate conductive layer 10 and the silicon substrate 14. The oxidation process results in an increase in the effective thickness of the gate dielectric layer 12 (column 3, lines 25-31). Additionally, as shown in Figure 1C, the oxide layer 20, which includes 20' and 20'', is not of uniform thickness. In fact, the oxide layer is only formed at the edges of the interface between the oxide layer 12 and the and the conductive layer 10 (Also described in Column 2, lines 62-64). Therefore Fang does not teach at least, forming a metal oxide layer with a substantially uniform thickness at an interface between a silicon oxide layer and a conductive layer, as recited in claim 9.

Claims 11, 18, and 19 are allowable for at least the reasons indicated above with respect to claim 9 by virtue of their dependence on claim 9 and for the additional features recited by these claims. For example, claim 18 recites that the oxide layer is formed by oxidizing a portion of the metal layer with oxygen atoms from the silicon oxide layer. In contrast, Fang teaches that the gate is exposed to oxygen which penetrates from the edge of the gate conductive layer and the gate dielectric layer and oxidizes portions of the gate conductive layer at the edge (column 2, lines 60-64). Therefore, Fang does not teach that the oxide layer is formed by oxidizing a portion of the metal layer with oxygen atoms from the silicon oxide layer. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Claim Rejections Under 35 U.S.C. § 103**

Claims 10 and 12-17 were rejected under 35 U.S.C. § 103(a) over Fang et al. in view of Van Zant ( Microchip Fabrication Textbook). Applicant respectfully traverses this rejection.

Claims 10 and 12-17 are allowable for at least the reasons presented above with respect to claim 9 by virtue of their dependence on claim 9 because neither Fang or Van Zant teach or suggest the subject matter of at least claim 9. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

**Conclusion**

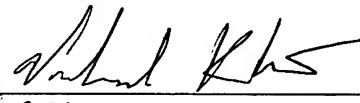
In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Attached is a marked-up version of the changes made to the claims by the current amendment. The attached Appendix is captioned **"Version with markings to show changes made"**.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

Pillsbury Winthrop LLP

By:  *Reg No. 51,873*  
for Glenn J. Perry  
Reg. No.: 28458  
Tel. No.: (703) 905-2161 *2113*  
Fax No.: (703) 905-2500

GJP\VVK  
1600 Tysons Boulevard  
McLean, VA 22102

(703) 905-2000  
Enclosure: Appendix

APPENDIXVERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE CLAIMS:

Claims 1-8 have been cancelled without prejudice or disclaimer.

Claim 9 has been amended as follows:

9. (Twice Amended) A method of fabricating a semiconductor device, comprising:
- preparing a semiconductor substrate;
  - forming a silicon oxide layer on the semiconductor substrate;
  - forming a conductive layer on the silicon oxide layer; and
  - forming a metal oxide layer with a substantially uniform thickness at an interface between the silicon oxide layer and the conductive layer.

**End of Appendix**